

Comments on NJDEP White Paper: VOC005 - Expanding Refinery Controls to Other Similar Facilities

Control Measure Summary from NJDEP White Paper	Comments on NJDEP White Paper
<u>The concepts discussed in the workgroup included:</u>	1) The Department does not clearly document the purpose and goals for considering the concepts outlined in the description. Is the goal to identify new or existing sources of fugitive emissions or both new and existing sources?
1) Expanded leak detection and repair to previously unidentified sources at existing LDAR affected facilities, such as heat exchangers, etc.	2) The Department references the October 1999 "Enforcement Alert" concerning LDAR at refineries, which asserts that "existing LDAR may be missing more leaks than anticipated, resulting in as much as 80 million pounds of emissions nationally per year." The Enforcement Alert also asserts that these emissions are being emitted each year because refinery leaks are not being identified properly and repaired promptly, as required by LDAR programs. The Department does not consider or address other mechanisms for improving leak detection monitoring reliability as documented in the enforcement alert under the section titled "Improving Leak Detection Monitoring Reliability". Several noted practices that are known to improve reliability include continuing education, use of a lower than required leak definition, and increased monitoring frequency.
2) Expand leak detection and repair to facilities that are currently not regulated by LDAR, that is to incorporate certain facilities and operations where fugitive emissions are potentially large emission sources.	
3) Another concept is to take a holistic approach to a facility by reviewing the entire site with infrared camera technology.	
4) Using infrared camera technology for an entire geographical area or specific sources of concern as an enforcement tool or as a public educational program.	
1) Expansion of LDAR to previously unidentified sources as existing LDAR facilities will require those facilities to expand their leak detection program. This will require minor regulatory changes.	The NJDEP does not adequately explain the implementation of this concept. The section does not define the types of sources to be included nor does it address what regulatory changes would be necessary.
2) Expansion of LDAR to facilities currently unregulated by LDAR will also require regulatory changes. Furthermore, NJDEP will need to identify exactly which sources should be included.	The NJDEP does not adequately explain the implementation of this concept. The section does not suggest examples of the types of sources to be regulated nor does it address what regulatory changes would be necessary.

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3) Reviewing an entire facility with an infrared camera technology would require the approval of this new technology. Upon approval, it would then need a regulatory change to substitute this in lieu of the current Leak Detection and Repair program. These infrared cameras would then need to be purchased by facilities or be available through consultants.	Note that the EPA has recently proposed the use of IR technology for the LDAR program (71 FR 17401). Any actions taken by NJDEP should take into account comments received by the EPA on its proposal.
4) Expansion of the use of Infrared technology for enforcement and/or educational purposes would require the DEP to purchase this technology or procure this technology through a SEP agreement. Use as an enforcement tool would require certification of the technology.	See above comment. Any actions taken by NJDEP should take into account comments received by the EPA on its proposal.
1) The cost of an expanded LDAR at existing facilities would be in the term of man-hours expended by the facility. This is highly variable based on the degree of LDAR expansion, the proficiency of the LDAR testers and even the location of any newly expanded testing. It would not require additional capital expense to monitor. Some of the costs would be offset by product recovery.	The cost would affect not only man hours expended by the facility personnel it could also increase cost of LDAR contractor services. It is incorrect to assume that expansion would not require additional capital expense to monitor as the location of monitoring points could result in the need for construction to access the points safely. There is no evidence that NJDEP has thoroughly reviewed the cost and implementation issues associated with this control measure. Any further analysis should be done in conjunction with the regulated community, such as the Workgroups, to accurately assess actual costs and implementation issues.
2) The cost of expansion of LDAR to currently unregulated facilities would involve cost to the newly regulated facilities. Leak Detection equipment, employee training, monitoring, recordkeeping and reporting are additional costs to the newly regulated facility.	There is no evidence that NJDEP has thoroughly reviewed the cost and implementation issues associated with this control measure. Any further analysis should be done in conjunction with the regulated community, such as the Workgroups, to accurately assess actual costs and implementation
3) The cost of reviewing an entire facility by Infrared technology would be the cost of this equipment, currently estimated at \$30,000. However, if facilities subcontracted this testing, the costs could be much lower and in lieu of capital investment, could instead be a periodic fee.	The Department provides no reference for the cost of the camera, nor does it address costs for training or long term O&M for the equipment. In addition, the VOC Workgroup Report lists the potential cost of the camera to be \$80,000 which is more than twice the cost stated in White Paper. The Department also does not provide costs for subcontractor (Example \$/day).
4) The cost of using infrared technology as an enforcement tool or for educational outreach would be the initial cost of the equipment and costs of recalibration.	The Department provides no reference for the cost of the camera, nor does it address costs for training or long term O&M for the equipment. In addition, the VOC Workgroup Report lists the potential cost of the camera to be \$80,000 which is more than twice the cost stated in White Paper. The Department also does not provide costs for subcontractor (Example \$/day).